

SR540L THRU SR5100L

5.0 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * Epitaxial construction

MECHANICAL DATA

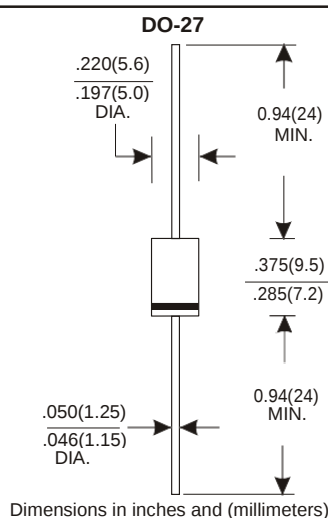
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.10 grams

VOLTAGE RANGE

40 to 100 Volts

CURRENT

5.0 Amperes



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SR540L	SR560L	SR5100L	UNITS
Maximum Recurrent Peak Reverse Voltage	40	60	100	V
Maximum RMS Voltage	28	42	70	V
Maximum DC Blocking Voltage	40	60	100	V
Maximum Average Forward Rectified Current	5.0			A
See Fig. 1				
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120			A
Maximum Instantaneous Forward Voltage at 5.0A	0.46	0.55	0.63	V
Maximum DC Reverse Current Ta=25°C	200			µA
at Rated DC Blocking Voltage Ta=100°C	20			mA
Typical Junction Capacitance (Note1)	570			pF
Typical Thermal Resistance R JA (Note 2)	20			°C/W
Operating Temperature Range Tj	-55 to +150			°C
Storage Temperature Range Tstg	-55 to +150			°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

RATING AND CHARACTERISTIC CURVES (SR540L THUR SR5100L)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

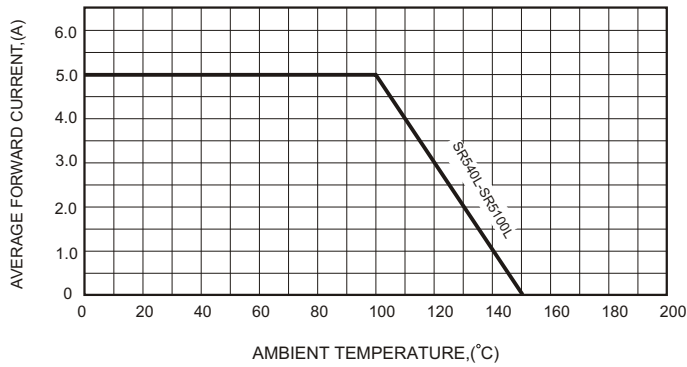


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

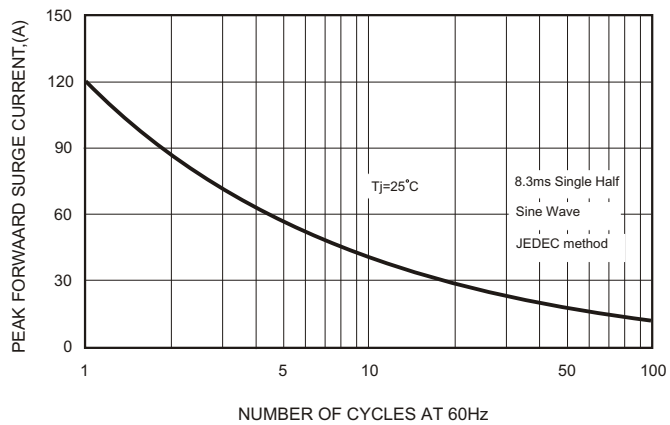


FIG.4-TYPICAL JUNCTION CAPACITANCE

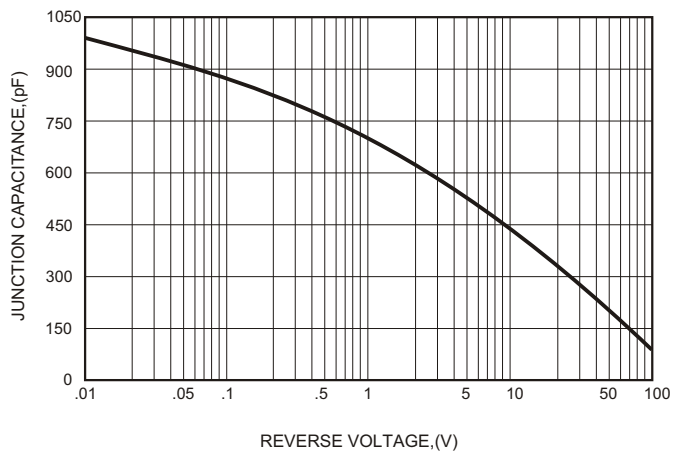


FIG.2-TYPICAL FORWARD CHARACTERISTICS

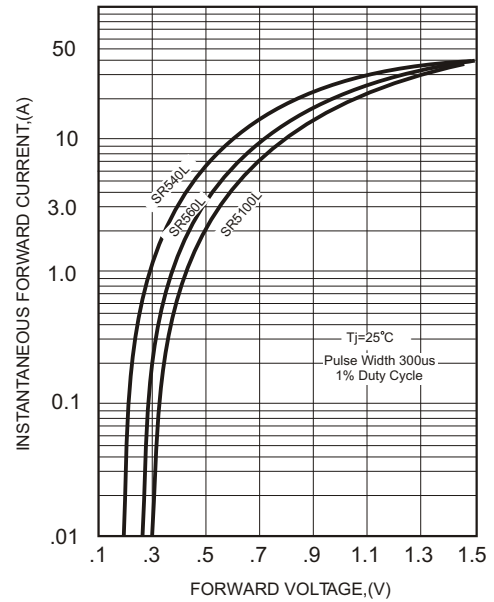


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

